

S/N 10/587,789PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Ezri Peleg

Serial No.: 10/587,789

Attorney Docket No.: 27275.005

Filed: March 03, 2008

Title: **HIGH LYCOPENE TOMATO VARIETIES AND  
USE THEREOF**

Examiner: Bui, Phuong T

Group Art Unit: 1638

**DECLARATION**

We the undersigned, Hazera Genetics Ltd., assignee for US Patent Application 10/587,789  
do hereby declare that on January 29, 2004 we sent for deposit with ATCC the following seeds:

2500 seeds of *Lycopersicon esculentum* HA3518 designated PTA-5796

This deposit has been made under the Budapest Treaty on the International Recognition of the  
Deposit of Microorganisms for the Purposes of Patent Procedure.

We hereby declare that the seeds will be irrevocably and without restriction or condition released  
to the public upon issuance of a patent for this application.

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Hazera Genetics Ltd.  
HAZERA GENETICS LTD

By:



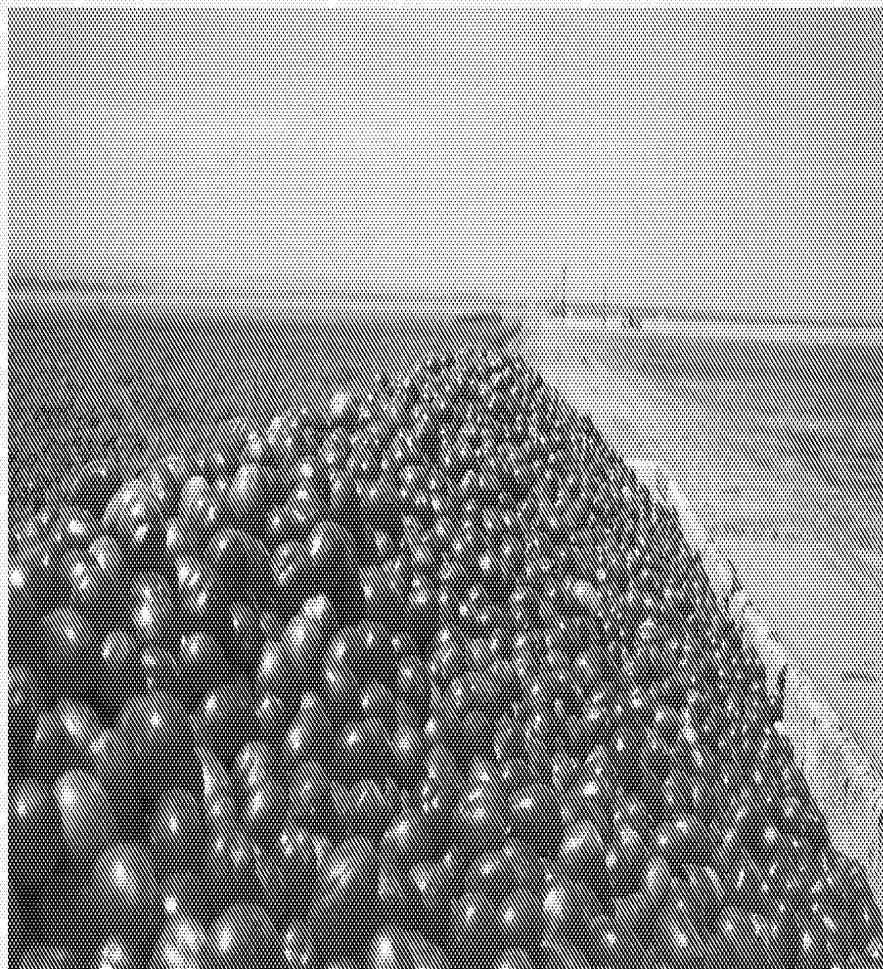
Date

29/05/2011

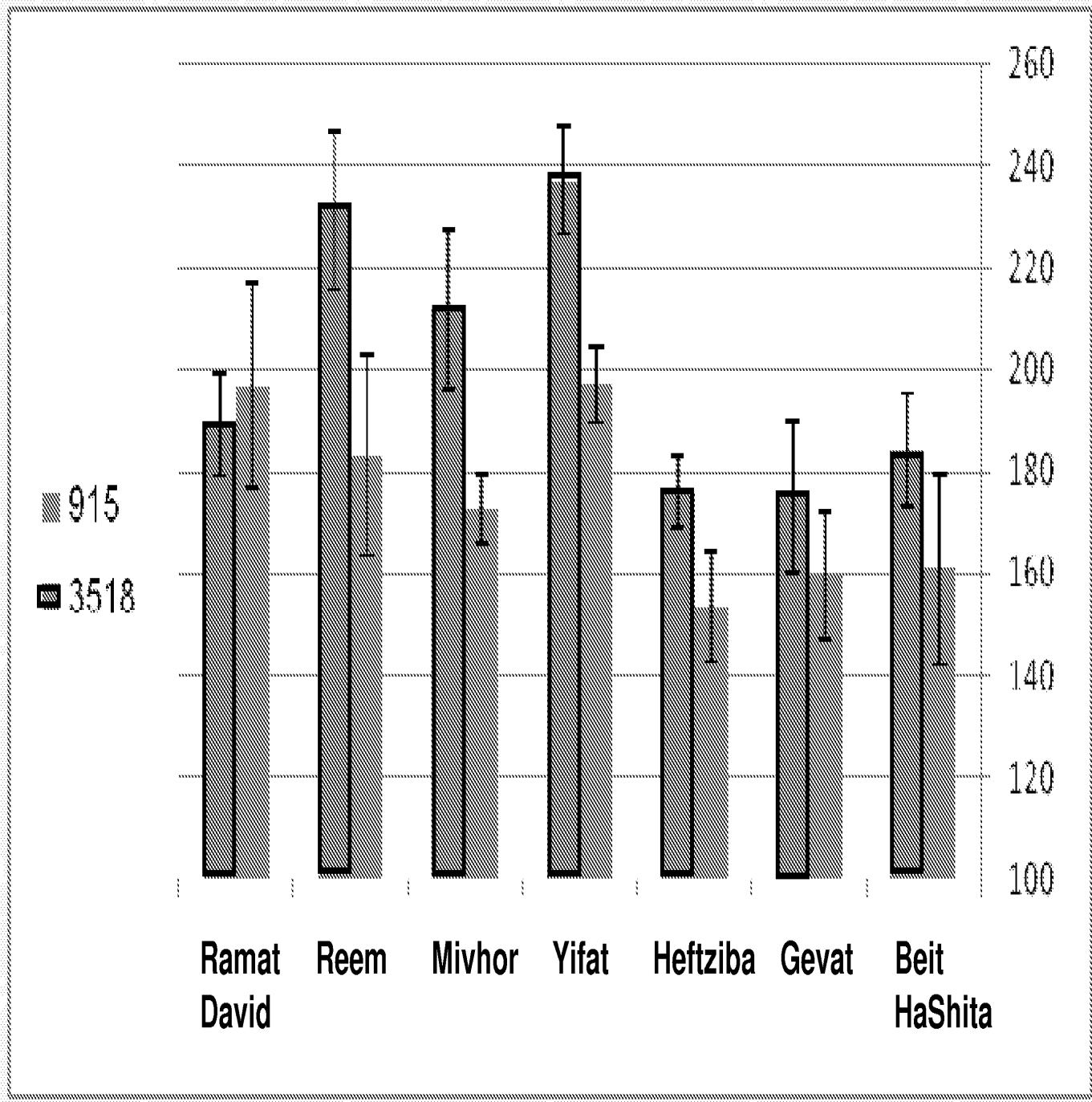


## Appendix IV

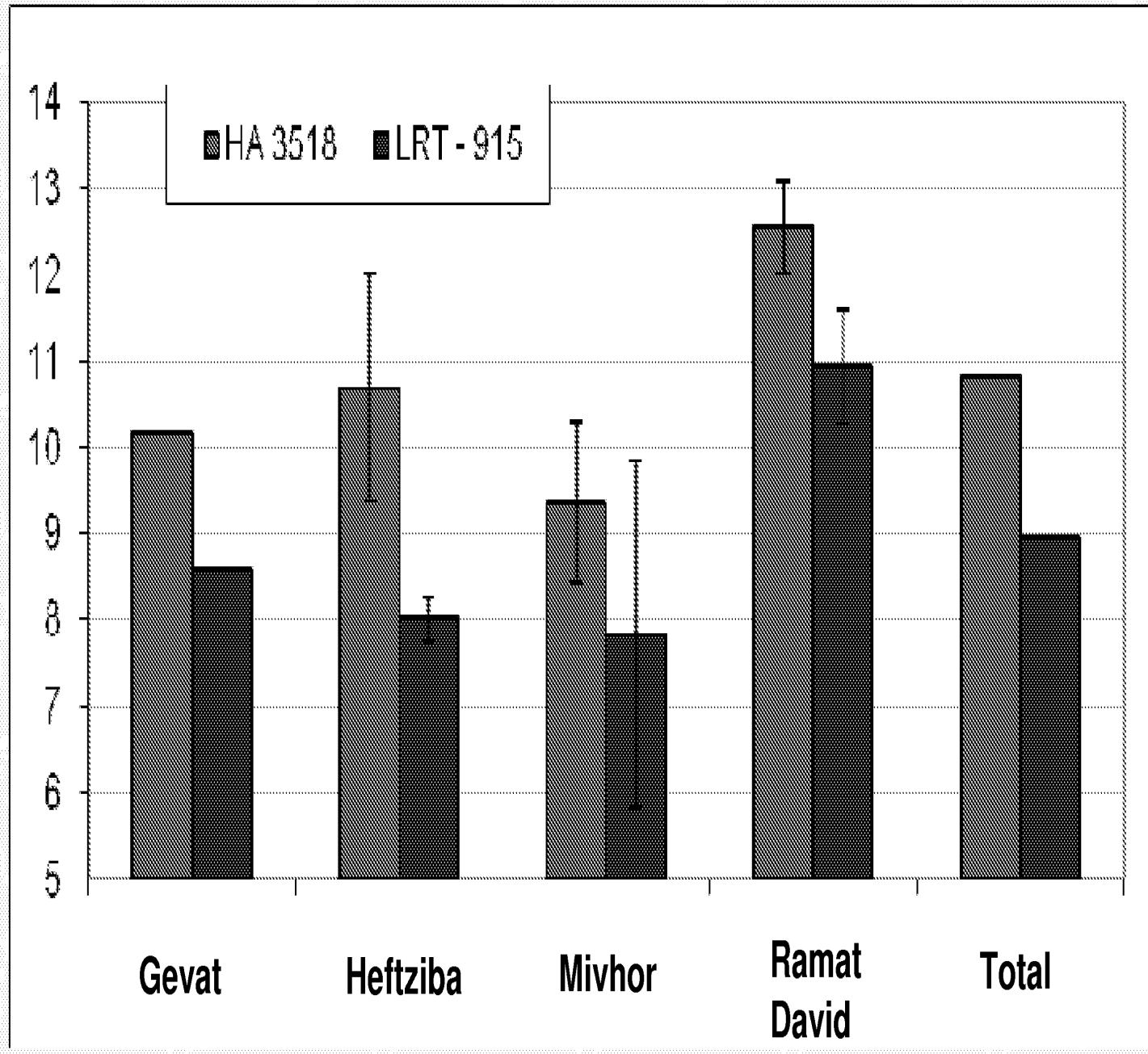
# Comparison between HA3518 and LRT915 (2002)



# Lycopene concentration (ppm)



# Fruit Yield (kg/m<sup>2</sup>)





## Summary of Lycopene content at different locations

HA3518 reaches an average (at 11 locations) Lycopene content of 204 ppm.

LRT915 reaches an average Lycopene content of 188 ppm.

The total average Lycopene content of HA3518 is 8% higher than LRT915



## Summary of fruit yield at the different locations

HA3518 produces an average (at 8 locations) yield of 9 kg/m<sup>2</sup>

LRT915 produces an average yield of 7.8 kg/m<sup>2</sup>

The total average yield of HA3518 is 14.5% higher than LRT915



## Summary of Lycopene concentration per dunam

HA3518 has an average (at 8 locations) lycopene per dunam of 1837 ppm/dunam.

LRT915 has an average (at 8 locations) lycopene per dunam of 1481 ppm/dunam.

The lycopene per dunam of HA3518 is 20% higher than LRT915.



GENETICS



**LRT915**



**HA3518**

# Table 1: Pleiotropic traits comparison

Trait/Phenotype	HA3518	LRT915
Sensitive leaves	-	+
Sudden leaf death	-	+
Brittle stems	-	+
Poor root system	-	+
Premature rotting fruits	-	+ (two weeks earlier)
Seed germination rate	High rate (about 92%)	Lower rate (about 72%)